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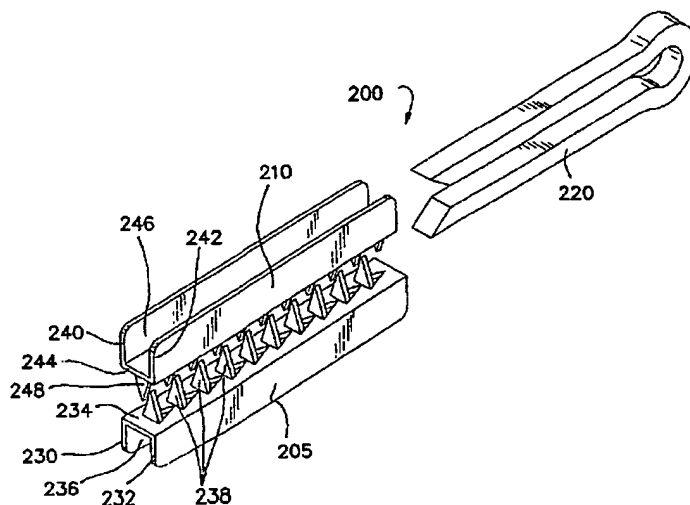
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(54) Title: **SURGICAL STAPLE-CLIP AND APPLIER**



(57) Abstract: A surgical staple-clip including a clip component (210, 205) and a securing member (220) is used in a wide range of surgical procedures. The staple-clip may be introduced to a surgical site in an un-assembled condition through a small port or trocar. An applier for the staple-clip comprising a pair of opposed jaw-like channels is provided to position and apply the clip component and the securing member. The clip component is positioned around a target tissue and is compressed or clamped upon the tissue using only the force required for a specific surgical procedure such as occlusion, ligation, or fixation. When the clip component is properly applied, the securing member is urged forward and over the clip component to secure the staple-clip.

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INTERNATIONAL SEARCH REPORT

International application No

PCT/US03/40318

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61B 17/08

US CL : 606/157

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U S : 606/157, 151, 158, 213, 219-221; 24/66.13

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,947,980 A (JENSEN et al) 07 September 1999 (07.09 1999), See figure 1; Column 2, lines 40-60	1-6, 8-13
X	US 5,843,101 A (FRY) 01 December 1998 (01.12 1998), See figure 5; Column 4, lines 1-9	1
X	US 6,325,810 B1 (HAMILTON et al) 04 December 2001, See figure 12; Column 3, lines 22-35	1

☐ Further documents are listed in the continuation of Box C☐ See patent family annex.

* Special categories of cited documents	"T"
"A" document defining the general state of the art which is not considered to be of particular relevance	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

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INTERNATIONAL SEARCH REPORT

PCT/US03/40318

BOX II. OBSERVATIONS WHERE UNITY OF INVENTION IS LACKING

This application contains the following inventions or groups of inventions, which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group 1, Claims 1-13 and 22-30 drawn to two tissue engaging members with three walls.

Group 2, Claims 14-21 drawn to tissue penetrating elements with a deformable connector

Group 3, Claims 31-34 drawn to a clip applier with a thumb mechanism

Group 4, Claims 35-38 describe a clip with a latch

Group 5, Claims 39-41 deal with a clamp with a tubular section and a wire.

Group 6, Claims 42-43 set forth a staple and a clip.

The inventions listed as Groups 1-6 do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Each invention has a separate inventive concept, as described above. Separate inventions require separate searches because of the burden required by the Examiner.

PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

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